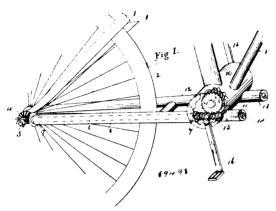
mechanism and to close the channel when the lever is moved to again interlock the parts. 14th. The combination, with the adjustable posts of a bicycle, of movable blocks, interlocking surfaces formed upon said blocks and upon the movable posts, fulcrumed cams with levers by which they are turnable, said cams having slots formed in them, lugs projecting from the blocks, and pins passing through said lugs and the slots of the cams. 15th. In an adjusting and locking mechanism for the reciprocating posts of a bicycle of the character described, pivoted cams having curved slots made therethrough, locking blocks with lugs, and pins passing through said lugs and the slots in the cams whereby the cams are turnable about their pivot points so as to compress the locking blocks against the parts to be secured or retract them therefrom, said cams having flattened faces which rest against the blocks in both the locked and the unlocked positions thereof.

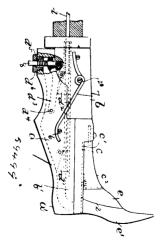
## No. 59,498. Bicycle. (Bicycle.)



George Charles Bateman and Samuel M. Brookfield, both of Halifax, Nova Scotia, Canada, 2nd April, 1898; 6 years. (Filed 10th February, 1898.)

Claim—.1st. The combination with a bicycle having a bevel gear wheel on the rear axle, of a driving shaft having a bevel gear wheel meshing therewith, and an endless screw or worm near the opposite end, a worm wheel on the pedal shaft gearing with said screw worm a tube connecting the rear part of the bicycle frame with the bracket or gear casing in which said pedal shaft is mounted on ball bearings, said driving shaft mounted on ball bearings in said tube, as set forth. 2nd. A bicycle having an endless screw driving shaft and worm wheel on the pedal shaft, and a bevel gear wheel connecting said shaft and the rear axle, as set forth. The combination with the pedal crank bracket or box, of the pedal shaft having a worm wheel and a driving shaft having and endless screw or worm meshing with said wheel and gearing with the axle of the rear wheel of the bicycle, as set forth.

No. 59, 499. Boot and Shoe Treeing and Shaping Ma-'chine. (Machine à emboucher et former les chaussures.)

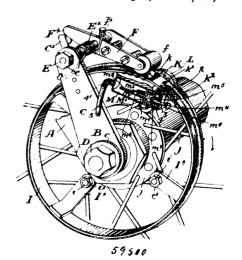


George Henry Clark, Boston, Massachusetts, U.S.A., 2nd April, 1898; 6 years. (Filed 7th March, 1898.)

Claim.—1st. A shoe shaping or treeing form composed essentially of a back part and a fore part, the latter having its shank portion movable to reduce its instep measurement to the ankle measurement

of the shoe, said back part and fore part being movable one with relation to the other to reduce the heel measurement of the form to the ankle measurement of the shoe, and an expanding device for separating said essential parts of the form, substantially as described. 2nd. A shoe shaping or treeing form composed essentially of a back part and a fore part, the latter having a sliding shank portion whereby its instep measurement may be reduced to the ankle measurement of the shoe, said essential parts being movable one with relation to the other to reduce the heel measurement of the form to said ankle measurement of the shoe and an expanding device for separating said essential parts of the form, substantially as described. A shoe shaping or treeing form composed essentially of a back part and a fore part, the latter having its shank portion movable to make its stank portion movable to mak able to reduce its instep measurement to the ankle measurement of the form, one of said essential parts sliding longitudinally with relation to the other to reduce the heel measurement of the form to said ankle measurement of the shoe, and an expanding device for separating said essential parts of the form, substantially as described. 4th. A shoe shaping or treeing form, composed essentially of a back part and a fore-part, the latter having a sliding shank portion, whereby its instep measurement may be reduced to the ankle measurement of the shoe, one of said essential parts sliding longiments. tudinally with relation to the other to reduce the heel measurement of the form to the ankle measurement of the shoe, and an expandof the form to the ankle measurement of the shoe, and an expanding device for separating said essential parts of the form, substantially as described. 5th. A shoe shaping or treeing form, composed essentially of a back leg portion having a heel, and a front leg portion having a detachable fore-part provided with a shank portion movable to reduce its instep measurement to the ankle measurement of the shoe, said fore-part sliding in and out with relation to the heel to reduce the heel measurement of the form to said ankle measurement of the shoe and an expanding device for separating measurement of the shoe, and an expanding device for separating the essential parts of the form, substantially as described. 6th. A shoe shaping or treeing form, composed essentially of a back leg portion having a heel and a front leg portion carrying a slide and a fore-part detachably connected to said slide, having its shank portion movable to reduce its instep measurement to the ankle measurement of the shoe, said fore-part sliding in and out with relation to the heel to reduce the heel measurement of the form to said ankle measurement of the shoe, and an expanding device for separating the essential parts of the form, substantially as described. 7th. An expansible shoe shaping or treeing form having a sliding fore-part with a movable shank portion, all the circumferential measure-ments of said form being reducible to the ankle measurement of the shoe, substantially as described. 8th. In a machine for shaping or treeing boots and shoes, a form having a bodily movable back leg portion, a guide pin therefor, an expanding rod having thereon two wedges, an arm pivotally connected to said back leg part which is engaged by the uppermost wedge, a spring for said arm, and an adjusting device for said spring, substantially as described. 9th. In a machine for shaping or treeing boots and shoes, a form having a front part with a pin 8, back leg part having a hole through it for a said thin, an averaging wedge, a viscoted arm described back leg. said pin, an expanding wedge, a pivoted arm  $d^3$  on the back leg partengaged by said wedge, a spring for said arm, and an adjusting nut for said spring, substantially as described.

## No. 59,500. Pump for Pneumatic Tires. (Pompe pour bandages pneumatiques.)



James Harry Keigley McCollum, Remigins Elmsley and William Henry Brouse, all of Toronto, Ontario, Canada, 2nd April, 1898; 6 years. (Filed 10th December, 1897.)

Claim.—1st. An automatic pumping attachment for bicycles comprising a ring secured to the wheel concentric to the axle, a tube secured on the ring, a roller suitably supported and designed to